National Aeronautics and Space Administration

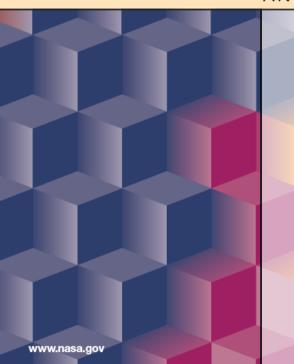HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

**NASA TECHNOLOGY INFUSION**

**ROAD TOUR**

AND MINORITY-SERVING INSTITUTIONS

# Bowie State University

Artelia M. Covington, EdD
Sponsored Programs Specialist

Office of
**Small Business**
Mentor-Protégé Program

# Bowie State University

- Located less than 15 miles from the Maryland's capitol, Annapolis
- Ranked in top 25 HBCUs by *US News & World Report*, 2014
  - 5,667 students (2016): 4,711 undergrad, 951 grad
  - 60.5% female, 39.5% male
  - Student demographics: 89% African-Am., 1% Asian-Am., 4% Hispanic, 1% White, 5% Other races/two or more races/unknown
- BSU is the oldest HBCU in Maryland and one of the oldest in the nation
- Largest first-time freshmen enrollment in history: 967
- New 150K square feet Natural Sciences, Mathematics, and Nursing building opening Fall 2017 with 23 Science teaching labs, 15 classrooms, 6 science research labs, 6 shared flexible classroom spaces, 82 academic offices, an informal student gathering space, a greenhouse, a nursing skills simulation suite and various labs for faculty members.

# Undergraduate & Graduate Degrees

### UNDERGRADUATE DEGREE PROGRAMS

Bioinformatics
Biology
Business Administration
Child and Adolescent Studies
Communications
Computer Science
Computer Technology
Criminal Justice
Early Childhood Education
Elementary Education
Fine Arts
History and Government
Mathematics
Nursing
Psychology
Science Education
Social Work
Sport Management
Theater Arts

### GRADUATE DEGREE PROGRAMS

Applied and Computational Mathematics (M.S.)
Business Administration (MBA)
Computer Science (D. Sc.)
Computer Science (M.S.)
Educational Leadership (Ed. D.)
Elementary Education (M. Ed.)
English (M.A.)
Human Resource Development (M.A.)
Management Information Systems (MIS)
Mental Health Counseling (M.A.)
Nursing (MSN)
Public Administration (MPA)
Reading Education (M. Ed.)
School Counseling (m. Ed.)
School Psychology (M. A.)
Secondary Education (M. Ed.)
Special Education (M. Ed.)
Teaching (MAT)

### CERTIFICATE PROGRAMS

Addictions Counseling
Applied and Computational Mathematics
Database Management/Artificial Intelligence
Geographical Information Systems & Image Processing
Graphics & User Interface
Information Systems Analyst
Network & Distribution Systems
Organizational Communications Specialist
Project Management
Psychotherapy
School Psychology
Scientific Software Development
Software Engineering

# Current Research Awards & Past Performance

- President's 1st Signature Program, Education Innovation Initiatives ($EI^2$) – Ecosystem for Student Success at BSU Project awarded $1.1M from National Science Foundation; 9/1/15 – 8/31/18

- K-20 Cybersecurity Pipeline awarded $1.5M from National Nuclear Security Administration; 10/1/14 – 9/30/19

- Bowie State Applied Biotechnology Initiative (BSABI) awarded $400K from National Science Foundation; 7/1/14 – 9/30/17

- STEM HBCU Network awarded $30K from National Aeronautics and Space Administration; 3/1/14 – 8/31/15

# Facilities & Specialized Equipment

– ***Maker Space***: This digital fabrication lab allowed students to design, develop, test and present a realistic IoT system for a specific industry domain utilizing digital fabrication tools such as 3D printers, a laser cutter, CNC machine, and microcontrollers with sensors and actuators.

– ***CHIP: Center for High-Performance Information Processing-*** The third fastest Supercomputer in the United States boasting a processing speed of 59 TeraFLOPS or 59 trillion calculations per second. BSU's interdisciplinary research teams use this processing power to sequence large databases of DNA through a DNA Barcoding Initiative to sample, identify and classify species; and in for sifting through big data-generating applications in in cybersecurity, computer forensics and life sciences

– ***LIISA: Laboratory for Information and Infrastructure Security and Assurance*** – This laboratory provides students with state-of-the-art technology equipment and software to attack and defend target computer networks in a secure environment

# University Points of Contact

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